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Copper alloys for electronic apparatus and their manufacture ΤI

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APPLICATION NO. DATE KIND DATE PATENT NO. _____ ---------------JP 1996-2768 19960111 19970325 A2 JP 09078162

PRAI JP 1995-173700 19950710 The title Cu alloys contain Cr 0.1-0.4, Sn 0.05-2, Zn 0.05-2, Pb and/or Ca total 0.005-0.2, P < 0.01, S < 0.005 and O2 < 0.005%; size of crystd. or pptd. substances < 3 .mu.m, and grain size < 5 .mu.m. Optionally, the Cu alloys may also contain Zr 0.01-0.2%. The Cu alloys for electronic app. are manufd. by casting the above stated Cu alloys at cooling speed .gtoreq. 5.degree./s, hot working at 850-1000.degree., cooling at cooling speed .gtoreq. 10.degree./s, cold working at draft .gtoreq. 80%, heat treating at 400-500.degree. for 10 min to 24 h, cold working at draft .ltoreq.

and final heat treating at 300-600.degree. for 10 min to 12 h in 50%, order. The Cu alloys have good strength, elec. cond., solderability, and punchability.